

CLAIMS

1. An automatic injection device comprising piston holders holding cylinder pistons and plural systems of heads having a drive mechanism for moving the piston holders forward and backward, whereby the device can hold a plurality of syringes and operates injection or suction in each syringe independently,  
said device comprising a backward-moving prohibition mechanism for prohibiting the backward-moving of the piston holder of a second head when the piston holder of a first head is in a forward-moving state and the piston holder of the second head is in a stopped state.
- 15 2. The automatic injection device according to claim 1, wherein said drive mechanism has a motor and mechanism for converting the rotation of the motor into a linear movement, and said backward-moving prohibition mechanism prohibits the axis of rotation to rotate in the backward direction.
- 20 25 3. The automatic injection device according to claim 1, wherein said drive mechanism has a motor and mechanism for converting the rotation of the motor into a linear movement, and said backward-moving prohibition

mechanism prohibits the linear movement in the backward direction.

4. The automatic injection device according to  
5 claim 1, wherein said backward-moving prohibition mechanism is selected from the group consisting of an electromagnetic brake, a disc brake, a ratchet and a worm gear.

10 5. The automatic injection device according to claim 1, wherein said device is a double head type with the number of systems of heads being two and holds two syringes.

15 6. The automatic injection device according to claim 1, wherein said device holds a syringe for injecting a contrast medium and another syringe for injecting a physiological saline solution.

20 7. The automatic injection device according to claim 5, wherein said device holds a syringe for injecting a contrast medium at the first head and a syringe for injecting a physiological saline solution at the second head.

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8. The automatic injection device according to

claim 5, wherein the tips of the two syringes are connected to a three way-branched tube.

9. The automatic injection device according to  
5 claim 7, wherein the tips of the two syringes are connected to a three way-branched tube.